

REMARKS

Entry of this amendment is respectfully requested.

The undersigned thanks the Examiner for the courtesies extended during the telephonic interview on November 3, 2005. As indicated in the Examiner's Interview Summary, the claimed invention was discussed as were the Seidel and Cuyler patents. The Examiner suggested that Applicants provide data showing proof of unexpected results that may be beneficial in determining the criticality of the invention. A declaration of co-inventor Hardy Wietzoreck which provides data showing the difference between Cuyler and the present application is submitted herewith. As set forth at the bottom of page 4 of the declaration, the ranges of certain contents, e.g., the ratio of the sum of the cations to P2O5 disclosed by the working examples of Cuyler is believed to differ from the present claims. In view of the declaration, withdrawal of all rejections based on Cuyler is respectfully requested.

Claims 51, 52, 55-65, 67-76 and 81-82 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Seidel in view of Reed. Applicants respectfully traverse.

The present application is primarily directed to a coil coating process where a phosphating solution is applied to form a film on the metallic surface.

Seidel teaches a no-rinse process. Reed concerns the coating of steel wires that shall be drawn using a rinse process. One would not combine these two references drawn to different technologies, and there is no motivation in the cited references to do so. Typically, wires as described by Reed are moved with very high speed in a (loose) bundle of wires through a phosphating bath and are then rinsed and finally coated with a wet or dry lubricant. Such double coatings are necessary for coldforming. Afterward the wires can be prolonged and reduced in diameter. Typically, the phosphate coatings for wire drawing are very thick to get an inner gliding layer. If this layer is too thin and the lubricant layer is too thin, then the wire would stick to the tool and would cause damage. Col. 1, line 61 teaches coatings weights of 5 to 16 g/m² which is different than presently claimed. The high cation content in wire drawing is needed to

generate an extremely thick phosphate coating in comparison to other applications. The high cation content in the present application is needed to generate sufficiently thick coatings on coils moving with a speed of 20 to today about 160 m/min which means that for only 60 m/min , i.e., 1 m per second. This allows contact times of only a few seconds with the phosphating solution and requires very quick drying time so as not to have long production lines. In contrast thereto, the phosphating bath may be in contact with a metallic part typically for 30 seconds to 10 min, so there is sufficient time to generate the phosphate coating.

Furthermore, coatings for coldforming serve different requirements; it is only a layer used for the coldforming process, and its residuals are then immediately removed. There is no true requirement for corrosion protection and no need for paint adhesion, just the opposite of the goals of the present application. The high contents of cations and phosphate are in both cases necessary to generate a coating within short time, but the quality of phosphate coatings on coil are significantly higher and much more specific than only for the coldforming. Thus, the objectives of the reference and the present application are not the same, and one would not look to this reference to solve the problems addressed by the present invention.

Furthermore, Reed only describes a manganese-free zinc phosphate solution, and use of manganese is not suggested because of slow reaction rates (col. 1, 2nd par.), which solution is not able to take up considerable amounts of manganese in the process.

In view of the foregoing and the amendments to the claims, it is respectfully requested that all rejections be withdrawn.

Allowance is respectfully requested.

Application No.: 09/980,910

Docket No.: NY-DNAG 224-US

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0624, under Order No. NY-DNAG 224-US.

Dated: February 17, 2006

Respectfully submitted,

By 

James R. Crawford

Registration No.: 39,155

FULBRIGHT & JAWORSKI L.L.P.

666 Fifth Avenue

New York, New York 10103

(212) 318-3148

(212) 318-3400 (Fax)

Attorneys for Applicant